

positioning a water draining device adjacent the press arrangement, the water draining device comprising a receiving tank, the receiving tank including a first chamber under ambient pressure, and a second chamber connected to the first chamber and to a vacuum source, and the second chamber including at least one drain;

receiving and collecting water under ambient pressure in the first chamber;

drawing a vacuum on said second chamber to aspirate water collecting in the first chamber into the second chamber; and

draining water through the at least one drain from the said second chamber.

REMARKS

Upon entry of the instant amendment, claim 1 will be canceled without prejudice or disclaimer, and claims 1, 5, 6 and 22 will be amended, whereby claims 2-40 will remain pending. Claims 2-23 are under prosecution and are rejected. Claims 24-40 stand withdrawn from consideration as being drawn to a non-elected invention.

Applicants note that claim 2 has been substantially rewritten to be in independent form, and that claims 2 and 22 have been amended to even more clearly recite that the first chamber is under ambient pressure and is capable of receiving and collecting water under ambient pressure. Moreover, claims 5 and 6 have been amended to correct an error of a typographical nature by adding "claim" before the dependent claim number.

Reconsideration and allowance of the application are respectfully requested.

Response to Formal Matters

Applicants express appreciation for the return of the initialed Forms PTO-1449, whereby the Examiner's consideration of Applicants' disclosure statements filed April 12, 2001 and July 11, 2002 is of record.

Applicants also express appreciation for the acknowledgment of the claim of priority as well as receipt of all of the certified copies of the priority documents.

Applicants further note that the Office Action does not include a Form PTO-948 - Notice of Draftsperson's Patent Drawing Review attached thereto, or any comment regarding the drawings as filed. In the absence of any indication to the contrary by the Patent and Trademark Office, Applicants assume that the drawings submitted with the application are acceptable, and that no further action is required with respect to submission of formal drawings.

Response To Maintaining Of Restriction Requirement

Applicants' election with traverse of Group I, claims 1-20, is acknowledged. Moreover, the restriction requirement between Groups I and II has been withdrawn, whereby claims 1-23 included in Groups I and II have been examined on the merits. However, the requirement has been maintained with respect to Group III, and claims 24-40 included in Group III stand withdrawn from further consideration by the Examiner, with the restriction requirement being made Final.

Applicants are permitting the non-elected claims to remain pending subject to rejoinder or cancellation without disclaimer or prejudice to the filing of the subject matter included therein in one or more continuation and/or divisional applications.

Response To Rejection Under 35 U.S.C. § 102(b) As Being Anticipated By HENNESSY

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by HENNESSY, U.S. Patent No. 5,487,193. The rejection asserts that HENNESSY discloses a drainage device having two chambers 44 and 50 connected to each other, and that HENNESSY also discloses that the second chamber is connected to a source of vacuum 42.

In response, Applicants note that claim 1 has been canceled without prejudice or disclaimer of the subject matter recited therein in combination with the subject matter recited in claim 2, e.g., a paper machine.

Accordingly, this ground of rejection is rendered moot, and shown be withdrawn.

Response To Rejection Under 35 U.S.C. § 102(b) As Being Anticipated By KADE

Claims 1, 2, 4-13 and 18-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by KADE, U.S. Patent No. 5,851,358.

The rejection asserts that KADE teaches a draining device having two interconnected chambers, the first chamber being open to the atmosphere, (ambient pressure) and the second chamber connected to a source of vacuum. The rejection further asserts that KADE teaches the use of the drainage device in a papermaking machine; an aperture connecting the chambers,

figure 3, a pipe between parts no. 50 and 46; and that KADE shows the pluralities of pipes and segments in the cross-machine direction of the roll. The rejection further asserts that from the figures of KADE it is seen that the velocity has component in the machine and cross machine direction, i.e., the water falls at an angle with respect to the roll, so that $V_{cd} = V \cos(\theta)$ and $V_{MD} = V \sin(\theta)$.

In response, Applicants respectfully submit that independent claim 2 is directed to a water draining device and a paper machine, the water draining device comprising a receiving tank, the receiving tank including a first chamber under ambient pressure and capable of receiving and collecting arriving water under ambient pressure, and a second chamber connected to the first chamber, the second chamber being connectable to a vacuum source so that the second chamber can be placed under vacuum for aspirating water collecting in the first chamber into the second chamber, and the second chamber including at least one drain from which water can be drained from the second chamber, the paper machine having a machine width; and the draining device extending at least substantially over the machine width. Moreover, independent claim 22 is directed to a method of draining water from a press arrangement serving to dewater a pulp web which includes at least one elongated press nip in a direction of web travel, comprising positioning a water draining device adjacent the press arrangement, the water draining device comprising a receiving tank, the receiving tank including a first chamber under ambient pressure, and a second chamber connected to the first chamber and to a vacuum source, and the second chamber including at least one drain; receiving and collecting water under ambient pressure in the first chamber; drawing a vacuum on said second chamber to aspirate water collecting in the

first chamber into the second chamber; and draining water through the at least one drain from the said second chamber.

In contrast, KADE is not structured and arranged nor does KADE teach or suggest applying suction to draw water from one area to another. Instead KADE discloses structure and operation thereof so as to apply suction to draw air from one area to another. In this regard, the Examiner's attention is directed to column 4 of KADE, at lines 46-60, and in particular, lines 54-60, which indicate that a vacuum is being utilized to suck air and not suck water in view of the fact that if water was being sucked, fibers would build up in the pump and inhibit operation of the pump.

More specifically, KADE discloses that:

Vacuum generating device 46 is mounted on top of cyclone separator 44 and generates a vacuum within suction chamber 42 to draw the liquid within suction chamber 42 into cyclone separator 44. In the embodiment shown, vacuum generating device 46 is in the form of a centrifugal blower 46 which is mounted on top of cyclone separator 44. The centrifugal blower blows air from a discharge nozzle 58 into the ambient environment. The air originates from the inlet to suction chamber 42 and is drawn through suction chamber 42, outlet 50 and into separator 44 along with the water from suction chamber 42. The water falls via gravitational force and exits through the outlet 54 of cyclone separator 44. The air, on the other hand, separates from the water and travels through centrifugal blower 46 to the ambient environment, as indicated by arrows 62. **If a liquid pump was used to pump the water within suction chamber 42 and create a vacuum within suction chamber 42, fibers within the water would likely build up on the pump and inhibit operation of the pump. On the other hand, the air which is separated from the water in separator 44 and flows through blower 46 is relatively free of fibers.**

(Emphasis added.)

Accordingly, Applicants respectfully submit that KADE does not teach each and every feature recited in Applicants' claims whereby the anticipation rejection is without appropriate basis and should be withdrawn.

(b) Claims 1, 2, 4-13 and 18-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by POIKOLAINEN et al. (hereinafter "POIKOLAINEN"), WO 98/44192.

In this rejection, it is asserted that POIKOLAINEN teaches a draining device having two interconnected chambers. The first chamber operating at ambient pressure and the second chamber connected to a source of vacuum. It is asserted that POIKOLAINEN teaches the use of the drainage device in a papermaking machine and an aperture 29 connecting the chambers, and that POIKOLAINEN shows the pluralities of pipes and segments in the cross-machine direction of the wire and/or roll. Still further, it is asserted that from the figures it can be seen that the velocity has component in the machine and cross machine direction, and that POIKOLAINEN shows the throttling device(s) 30 and 36.

In contrast to Applicants' disclosed and claimed invention, it appears from the disclosure of POIKOLAINEN that his device is not constructed and arranged nor is it operated so that water is received and collected under ambient pressure. Instead, the water draining device of POIKOLAINEN is constructed, arranged and operated so as to be subjected to a vacuum in each position in the device. Accordingly, POIKOLAINEN does not teach or suggest a water draining device comprising, amongst other features, a receiving tank, the receiving tank including a first chamber under ambient pressure and capable of receiving and collecting arriving water under

ambient pressure, and a second chamber connected to the first chamber, the second chamber being connectable to a vacuum source so that the second chamber can be placed under vacuum for aspirating water collecting in the first chamber into the second chamber, and the second chamber including at least one drain from which water can be drained from said second chamber. Moreover, POIKOLAINEN does not teach or suggest a method which comprises, amongst other features, positioning a water draining device adjacent the press arrangement, the water draining device comprising a receiving tank, the receiving tank including a first chamber under ambient pressure, and a second chamber connected to the first chamber and to a vacuum source, and the second chamber including at least one drain; receiving and collecting water under ambient pressure in the first chamber; and drawing a vacuum on said second chamber to aspirate water collecting in the first chamber into the second chamber.

Accordingly, Applicants respectfully submit that POIKOLAINEN does not teach each and every feature recited in Applicants' claims whereby the anticipation rejection is without appropriate basis and should be withdrawn.

(c) Claims 3, 14-17, 21 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over KADE or POIKOLAINEN.

Initially, prior to discussing the merits of the rejection, Applicants note that claim 23 is not included in any of the rejections of record; however, the cover page of the Official Action indicates that claims 1-23 are rejected. It therefore appears that the Examiner intended to include

claim 23 in this obviousness rejection. If this is not the case, Applicants respectfully submit that the Examiner clarify the record.

Applicants respectfully submit that this obvious rejection does not overcome the deficiencies of either KADE or POIKOLAINEN. Accordingly, whether or not one having ordinary skill in the art would have been motivated to modify KADE or POIKOLAINEN in the manner recited in the rejection, Applicants' disclosed and claimed invention would not be at hand.

Moreover, Applicants respectfully submit that the rejection is without sufficient basis because it makes naked assertions without establishing where the prior art provides any motivation for arriving at the asserted substitution. The Examiner is reminded that written documentation is necessary in a rejection to support the asserted combination and to supply the motivation therefore. In the instant situation, the rejection merely makes a naked assertion without documentary support.

Moreover, the rejection contends that the dimensions of the pipes and vacuum in the chamber including the use of a volumetric pump is an optimization of result effective variables and would have been obvious. Again, this is insufficient to support a rejection a rejection. The rejection must establish that the art recognizes these to be result effective variable. In this instant situation, the rejection is silent with respect to any indication that the documents utilized in the rejections are routine the realm of routine experimentation so as to optimized.

Thus, applicants respectfully submit that the only teaching or suggestion that would lead one having ordinary skill in the art to arrive at Applicants' invention is within Applicants'

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disclosure, and the use of such disclosure by the Examiner is improper. In order to support the conclusion that the claimed invention is either anticipated or rendered obvious over the prior art, the prior art must either expressly or inherently teach the claimed invention or the Examiner must present a convincing line of reasoning why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. Ex parte Clapp, 227 U.S.P.Q. 972 (B.O.A. 1985). There is absolutely no convincing line of reasoning present here that would lead one having ordinary skill in the art to arrive at Applicant's disclosed and claimed invention.

Accordingly, the rejection should be withdrawn, and all of the claims should be indicated as allowable over the prior art.

CONCLUSION

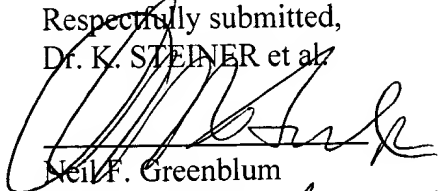
In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejection of record, and allow all the pending claims.

Allowance of the application is requested, with an early mailing of the Notices of Allowance and Allowability.

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If the Examiner has any questions or wish to further discuss this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,
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APPENDIX
MARKED UP COPY OF AMENDED CLAIMS 2, 5, 6 AND 22

2. In combination, [the] a water draining device [according to claim 1] and a paper machine[.];

said water draining device comprising a receiving tank, said receiving tank including a first chamber under ambient pressure and capable of receiving and collecting arriving water under ambient pressure, and a second chamber connected to said first chamber, said second chamber being connectable to a vacuum source so that said second chamber can be placed under vacuum for aspirating water collecting in the first chamber into said second chamber, and said second chamber including at least one drain from which water can be drained from said second chamber;

said paper machine having a machine width[.]; and

said draining device extending at least substantially over the machine width.

5. (Amended) The combination according to claim 4 including apertures distributed over the machine width, said apertures connecting said first chamber and said second chamber.

6. (Amended) The combination according to claim 2 including apertures distributed over the machine width, said apertures connecting said first chamber and said second chamber.

22. (Amended) A method of draining water from a press arrangement serving to dewater a pulp web which includes at least one elongated press nip in a direction of web travel, comprising:

positioning a water draining device adjacent the press arrangement, the water draining device comprising a receiving tank, the receiving tank including a first chamber under ambient

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pressure, and a second chamber connected to the first chamber and to a vacuum source, and the second chamber including at least one drain;

receiving and collecting water under ambient pressure in the first chamber;

drawing a vacuum on said second chamber to aspirate water collecting in the first chamber into the second chamber; and

draining water through the at least one drain from the said second chamber.